WHAT IS CLAIMED IS:

1. A sheet polarizer having a great length, wherein the sheet polarizer has a transmission axis neither parallel nor perpendicular to the longitudinal direction.

2. The sheet polarizer according to claim 1, comprising at least a transparent substrate and a polymer layer having a polarization capability, wherein the polymer layer has a cross-linked structure.

3. The sheet polarizer according to claim 2, wherein the polymer layer comprises a polyvinyl alcohol or a modified polyvinyl alcohol.

4. The sheet polarizer according to claim 3, wherein the polyvinyl alcohol or the modified polyvinyl alcohol has a saponification degree of at least 95 %.

5. The sheet polarizer according to any of claims 2 to 4, wherein the cross-linked structure is formed by reaction between the polymer and a cross-linking agent.

6. The sheet polarizer according to claim 5, wherein the cross-linking agent is a boric acid compound.

7. The sheet polarizer according to any of claims 2, 3, 4 and 6, wherein the polymer layer further comprises iodine.

8. The sheet polarizer according to any of claims 2, 3, 4 and 6, wherein the polymer layer further comprises a dichroic dye.

9. The sheet polarizer according to claim 5, wherein

the polymer layer further comprises iodine.

10. The sheet polarizer according to claim 5, wherein the polymer layer further comprises a dichroic dye.

11. A method of producing a sheet polarizer comprising:

a step of coating a long transparent substrate with a polymer layer,

a step of subjecting the polymer layer to a rubbing treatment, and

a step of adsorbing iodine or a dichroic dye to the rubbed polymer layer to bring about a state of orientation.

12. A method of producing a sheet polarizer comprising:

a step of coating a long transparent substrate with a polymer layer containing iodine or a dichroic dye, and

a step of subjecting the polymer layer to a rubbing treatment.

13. The method of producing a sheet polarizer according to claim 11 or 12, wherein the polymer layer is a layer comprising a polyvinyl alcohol or a modified polyvinyl alcohol.

14. The method of producing a sheet polarizer according to claim 13, wherein the polyvinyl alcohol or the modified polyvinyl alcohol has a saponification degree of at least 95 %.

15. The method of producing a sheet polarizer according to claim 11 or 12, wherein the rubbing treatment is carried out continuously by arranging a rubbing roll at an oblique angle

to the direction in which a long film of the polymer layer-coated transparent substrate is made to travel and rubbing the polymer layer with the rubbing roll while moving the long film so as to wrap the rubbing roll.

16. The method of producing a sheet polarizer according to claim 15, wherein the oblique angle at which the rubbing roll is arranged is 45 degrees to the direction in which the long film travels.

17. A method of producing a sheet polarizer comprising:

a step of coating a long transparent substrate with a polymer layer made up of at least a modified polyvinyl alcohol,

a step of rubbing the polymer layer in a direction neither parallel nor perpendicular to the longitudinal direction, and

a step of adsorbing iodine or a dichroic dye to the rubbed polymer layer to bring about a state of orientation.

18. A method of producing a sheet polarizer comprising:

a step of coating a long transparent substrate with a polymer layer made up of at least a modified polyvinyl alcohol in which iodine or a dichroic dye is contained, and

a step of rubbing the polymer layer in a direction neither parallel nor perpendicular to the longitudinal direction.

19. An optical film formed by comprising stretching a film comprising a polyvinyl alcohol or a modified polyvinyl alcohol at an oblique angle ranging from 10 to 80 degrees to the machine direction of the film.

20. A sheet polarizer comprising two transparent substrates and a polarization layer sandwiched between them, wherein the polarization layer comprises a polyvinyl alcohol film stretched at an oblique angle ranging from 10 to 80 degrees and a polarizing element adsorbed to the film in an oriented state.

21. The sheet polarizer according to claim 20, wherein at least one of the transparent substrates satisfies the following relations at any of wavelengths ranging from 380 nm to 780 nm:

$$-10 \leq (nx - ny) \times d \leq 10$$

$$0 \leq \{(nx + ny)/2 - nz\} \times d \leq 40$$

wherein d represents a thickness of the transparent substrate, each n represents a refractive index, x represents the machine direction of the transparent substrate, y represents the transverse direction of the transparent substrate, and z represents the thickness direction of the transparent substrate.

22. The liquid crystal display comprising a liquid crystal cell and two sheet polarizers arranged on both sides of the cell, wherein at least one of the two sheet polarizers is a sheet polarizer according to claim 20 or 21.